

REMARKS

1. In response to the final Office Action mailed March 7, 2007, Applicants respectfully requests reconsideration. Claims 2-22 was previously presented in the application. In the outstanding Office Action, all claims have been rejected. By the foregoing Amendments, claims 2, 5, 9, and 16 have been amended. Claims 3, 10, and 17 have been canceled. No claims have been added. Thus, upon entry of this paper, claims 2, 4-9, 11-16, and 18-22 will be pending in this application. Of these eighteen (18) claims, claims (claims 2, 9, and 16) are independent. Based on the above Amendments and following Remarks, Applicant respectfully requests that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Specification

2. Applicants have amended the paragraph at lines 19-31 of the specification to remove erroneous language.

Art of Record

3. Applicants acknowledge receipt of form PTO-892 identifying additional references made of record by the Examiner.

4. Applicants thank the Examiner for returning the form PTO/SB/08a filed by Applicant on December 19, 2006, which have been initialed by the Examiner indicating consideration of the references cited therein.

Claim Objections

5. Independent claims 2, 9, and 16 and dependent claim 5 have been objected to because of various informalities. Applicants have amended claims 2, 5, 9, and 16 to overcome these objections. Applicants respectfully request that these objections be withdrawn.

Claim Rejections under 35 U.S.C. §101

6. Independent claims 2, 9, and 16 and dependent claims 3-8, 10-15, and 17-22 have been rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. Based upon the above Amendments and the following Remarks, Applicant respectfully requests reconsideration and withdrawal of the rejections under 35 U.S.C. §101.

7. Pursuant to 35 U.S.C. §101, patentable subject matter includes “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” Laws of nature, natural phenomena, and abstract ideas (*e.g.*, mathematical formula), however, fall outside the scope of patentable subject matter. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1360 (Fed. Cir. 1999), cert. denied, 120 S. Ct. 368, 145 L. Ed. 2d 284 (U.S. 1999). In rejecting the claims under 35 U.S.C. §101, the Examiner did not specifically identify which of these three categories the Examiner believed the rejected claims fall into. It appears, however, that the Examiner is asserting that the claims are directed to abstract ideas (*i.e.*, mathematical formulas) in asserting that the claims fall outside the scope of patentable subject matter.

8. Review of the Federal Circuit’s opinion in *AT&T Corp. v. Excel Communications, Inc.* is useful. In reversing a lower court finding that the claims failed to satisfy the requirements of 35 U.S.C. §101 (*i.e.*, is directed to statutory subject matter), the Federal Circuit noted that the Supreme Court has construed § 101 broadly, noting that Congress intended statutory subject matter to “include anything under the sun that is made by man.” *See Diamond v. Chakrabarty*, 447 U.S. 303, 309, 100 S.Ct. 2204, 65 L.Ed.2d 144 (1980) (quoting S.Rep. No. 82-1979, at 5 (1952); H.R.Rep. No. 82-1923, at 6 (1952)).

9. The Federal Circuit further noted that although abstract ideas (*e.g.*, mathematical formula) fall outside statutory subject matter, the Federal Circuit has held that the judicially-defined proscription against patenting of a “mathematical algorithm,” to the extent such a proscription still exists, is narrowly limited to mathematical algorithms in the abstract. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1356 (Fed. Cir. 1999), cert. denied, 120 S. Ct. 368, 145 L. Ed. 2d 284 (U.S. 1999). The Federal Circuit further noted that patent claims containing mathematical algorithms need not involve a physical transformation

or conversion of subject matter from one state into another to be deemed patentable subject matter. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d at 1358-1359.

10. Applicants, accordingly, respectfully submit that the claims of the present application satisfy the requirements of 35 U.S.C. §101. For example, independent claim 2 produces a real life, real world, useful, concrete, and tangible result: inserting instrumentation bytecode in a bytecode representation of a method and the bytecode being executed to generate a call to an interface. Independent claims 9 and 16 include similar recitations, and are likewise directed to statutory subject matter under controlling Federal Circuit precedent.

11. Additionally, Applicants note that in rejecting the claims of the present invention, the Examiner asserted that physical components (*e.g.*, a processor or memory) must be utilized in the method and systems to allow the result of their operation to be rendered tangible. (*See*, Office Action at pg. 3.) Without commenting on whether controlling law so requires, Applicants have amended independent claims 2 and 9 to specifically recite that the method and system of claims 2 and 9, respectively, utilize physical components (*i.e.*, a processor), in order to expedite prosecution of the present application. Applicants further note that independent claim 16 is recited in means plus function language and as such, pursuant to 35 U.S.C. §112, paragraph 6, independent claim 16 is to be construed as covering the “corresponding structure, material, or acts described in the specification or equivalents thereof.” (*See*, 35 U.S.C. §112, paragraph 6.) Applicant accordingly requests that the Examiner reconsider and withdraw the rejection under 35 U.S.C. §101 for at least these reasons.

Claim Rejections under 35 U.S.C. §102

12. Independent claims 2, 9, and 16 and dependent claims 3-8, 10-15, and 17-22 have been rejected under 35 U.S.C. § 102(b) as clearly anticipated by U.S. Patent No. 6,314,558 to Angel, *et al.* (hereinafter, “Angel”). Based upon the above Amendments and following Remarks, Applicants respectfully request reconsideration and withdrawal of these rejections.

13. Independent claim 2, as amended, recites “inserting instrumentation code in a bytecode representation of the selected at least one method without modifying a source code of the selected at least one method by generating a wrapper method that contains the instrumentation code and a call to the bytecode representation of the at least one method, wherein the instrumentation code comprises bytecodes...” Because Applicants have amended claim 2 to incorporate limitations similar to those previously recited in now

canceled claim 3, Applicants will address the Examiner's rejection to previously pending dependent claim 3 in the below discussion.

14. In rejecting previously pending claim 3, the Examiner asserted that Angel discloses inserting instrumentation code in the selected a method by generating a wrapper method that contains the instrumentation code and the method. (*See*, Office Action at pg. 4). In support the Examiner relied on column 26 lines 14-31 of Angel. (*See*, Office Action at pg. 4.)

15. Angel is directed to instrumenting a computer program to provide instrument by code. (*See*, Angel at Abstract.) Angel discloses in FIG. 20, a method for instrumenting a class in which each method of the class is instrumented by iterating through the methods of the class. (*See*, Angel at col. 26 lines 1-3.) Column 26 lines 14-31 of Angel disclose that if the method is implemented in native code, instrumenting the code is handled by adding a byte code wrapper to the native code method. (*See*, Angel at col. 26 lines 14-18.) Native code refers to machine code that is platform specific and can only run on a particular platform. This byte code wrapper of Angel is used as a mechanism to allow the virtual machine of Angel to handle a native code method as a byte code method. Angel further discloses that this byte code wrapper is added to the native code method by modifying the native attribute of the method to convert the native code method to a byte code method, creating a new name for the native code method, and adding the new name as a private native method declaration, and adding byte code instruction to call the native method under the new name. (*See*, Angel at col. 26 lines 18-26.)

16. As such, the byte code wrapper of Angel is only disclosed as being used for native code methods to permit a virtual machine to handle the native code methods as byte code methods. Angel does not, however, teach or suggest generating a wrapper method for a bytecode representation of a method. Angel further does not teach or suggest that the byte code wrapper of Angel includes both instrumentation code and a call to a bytecode representation of the method. Rather, Angel merely discloses that the byte code wrapper of Angel may be added to the native code method, and does not teach or suggest adding a byte code wrapper to a byte code representation of a method.

17. Applicants accordingly respectfully submit that Angel does not teach or suggest "inserting instrumentation code in a bytecode representation of the selected at least one method without modifying a source code of the selected at least one method by generating a wrapper method that contains the instrumentation code and a call to the bytecode

representation of the at least one method, wherein the instrumentation code comprises bytecodes,” as recited by amended claim 2. Applicants accordingly respectfully request that the Examiner reconsider and withdraw the rejection of claim 2 for at least this reason.

18. Independent claims 9 and 16 have been similarly amended, and, as such, Applicants respectfully submit that for at least similar reasons to those discussed above with reference to independent claim 2, independent claims 9 and 16 are likewise in condition for allowance.


Dependent Claims

19. The dependent claims incorporate all of the subject matter of their respective independent claims and add additional subject matter which makes them *a fortiori* independently patentable over the art of record. Accordingly, Applicants respectfully request that the outstanding rejections of the dependent claims be reconsidered and withdrawn.

Conclusion

20. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

Respectfully submitted,



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